



## RE36N/D N/DYM®

### Dynamic Cardioid Vocal Microphone

- Small size
- Low proximity effect (up-close bass boost) for high vocal clarity
- N/DYM® magnetic structure makes small size practical
- DynaDamp™ shock-isolation system for low handling noise

#### SPECIFICATIONS

##### Generating Element:

Dynamic

##### Frequency Response (see Figure 1):

90-15,000 Hz

##### Polar Pattern (see Figure 2):

Cardioid

##### Impedance:

150 ohms balanced

##### Sensitivity:

Open-Circuit Voltage:

0.8 mV/Pascal at 1,000 Hz

##### Power Level:

-63 dB at 1,000 Hz (0 dB = 1 mW/Pascal)

##### Hum Sensitivity in a 1-Millioersted Field,

60 Hz:

-126 dBm typical

##### Magnetic Circuit:

N/DYM® magnet in a nonwelded circuit

##### Polarity (see Figure 3):

Pin 2 will be positive referenced to pin 3 with positive pressure on diaphragm

##### Case Material:

Aluminum and steel

##### Finish:

Semigloss black

##### Dimensions (see Figure 4),

###### Length:

136 mm (5.35 in.)

###### Maximum Diameter:

33.0 mm (1.30 in.)

##### Cable Supplied:

4.6-m (15-ft) two-conductor shielded rubber-jacketed black broadcast-type cable, supplied with a Switchcraft A3F-type connector on the microphone end

##### Accessories Included:

311 stand adapter;

458 zippered protective vinyl carrying pouch

##### Net Weight:

125 g (4.4 oz)

##### Shipping Weight:

325 g (54.2 oz)

#### DESCRIPTION AND APPLICATIONS

The Electro-Voice RE36N/D is a small, shock-isolated N/DYM® dynamic cardioid microphone with low proximity effect. "Proximity effect" is the up-close bass boost that occurs with the usual "single-D" directional microphone, and is often inappropriate for sound reinforcement systems in large venues—where intelligibility is highly important and users vary widely in their knowledge of proper microphone technique. The RE36N/D has a smooth, wide-range frequency response up close, which provides a high degree of clarity in vocal applications. This performance accurately mimics the sound quality of "classic" EV Variable-D® microphones such as the RE16 and RE18, but in a small, unobtrusive physical package.

Utilizing EV's revolutionary neodymium alloy N/DYM® magnets and a reinforced diaphragm dome, the RE36N/D offers increased sensitivity for its size and extended high-frequency response. The RE36N/D has a vibration-isolation system which employs EV's unique dynamic damping material—DynaDamp™. DynaDamp is a low-Q elastomeric polymer with extremely high energy-absorbing properties. The end result is a substantial reduction in handling and cable transmission noise.

The design and construction of the RE36N/D's polar characteristics provide the reduced proximity effect. All single-D directional microphones exhibit bass-boosting proximity effect when the microphone is used at working distances closer than about 12 inches. At a 1/4-inch distance, the

RE36N/D has a proximity effect of less than 9 dB at 100 Hz, in contrast to the typical single-D vocal microphone's 18 dB at 100 Hz.

The RE36N/D's directional pattern, very uniform in the midrange, ensures superior gain-before-feedback in live applications. The directional-control characteristics provide a smooth transition from front to back which keeps off-axis coloration to a minimum.

The dynamic element of the RE36N/D ensures reliable operation despite fluctuations in humidity and temperature. A two-stage Acoustifoam™ pop filter reduces both wind noise and vocal P-popping. A rugged, machined aluminum and steel case and a Memraflex™ grille—which resists deformation from accidental drops—will withstand all the rigors of professional use. A highly effective hum-bucking coil attenuates hum from lighting and other sources. An acoustically transparent shield prevents dust and iron particles from reaching the diaphragm.

#### ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The microphone shall be a dynamic cardioid type with wide-range, uniform frequency response from 90-15,000 Hz. The microphone shall exhibit low proximity effect (up-close bass boost): 100-Hz output shall be elevated by no more than 9 dB relative to mid-band output when the working distance is decreased from 305 mm (12 inches) to 6.4 mm (1/4 in.). An integral blast filter shall protect all acoustic openings.

The open-circuit voltage sensitivity shall be 0.8 mV/pascal at 1,000 Hz and the power-level sensitivity shall be -63 dB at 1,000 Hz where 0 dB equals 1 mW per pascal. The magnetic circuit shall be nonwelded and employ a neodymium alloy magnet. The transducer shall employ a

FIGURE 1 — Frequency Response

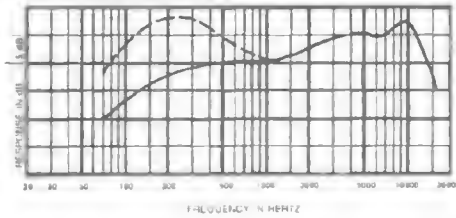


FIGURE 2 — Polar Response

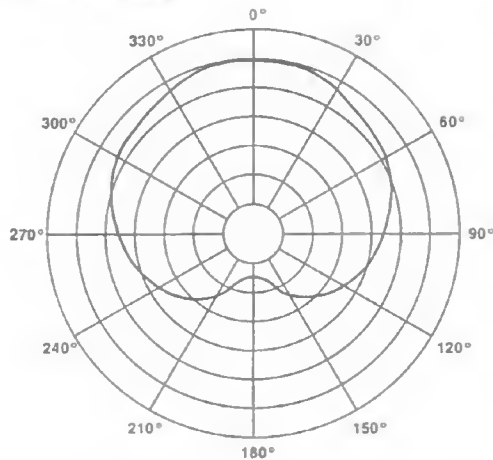


FIGURE 3 — Wiring Diagram

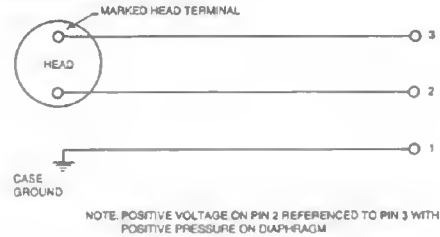
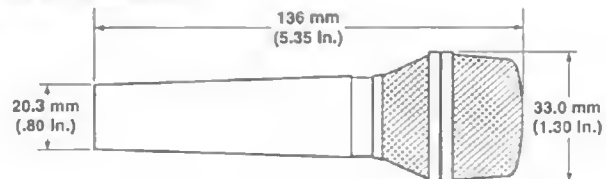


FIGURE 4 — Dimensions



hum-bucking coil with a resulting hum sensitivity of -126 dB at 60 Hz in a 1-millioersted field. A shield to prevent dust and iron particles from reaching the diaphragm shall be provided. Rated impedance shall be 150 ohms. Line shall be balanced to ground and phased. Pin 2 shall have a positive voltage with reference to pin 3 with positive pressure on the diaphragm.

Response at any angular position away from the major axis shall be essentially similar to the response on the major axis, except attenuated uniformly at all frequencies by an amount appropriate to that angular position. Polar characteristics shall be sufficiently uniform in all planes to be, effectively, a cardioid of revolution.

The case shall be made of aluminum and steel. The microphone shall have a maximum diameter of 33.0 mm (1.30 in.) and a length of 136 mm (5.35 in.). The finish shall be semigloss black. A 4.6-m (15-ft) two-conductor shielded broadcast-type synthetic rubber-jacket cable with a Switchcraft A3F-type connector at the microphone end shall be supplied. The microphone shall have a Switchcraft A3M-type connector built-in. A 311 stand adapter and 458 zippered protective vinyl carrying pouch shall be supplied.

The Electro-Voice RE36N/D is specified.

#### WARRANTY (LIMITED)

Electro-Voice products are guaranteed against malfunction due to defects in materials or work-

manship for a specified period, as noted in the individual product-line statement(s) below, or in the individual product data sheet or owner's manual, beginning with the date of original purchase. If such malfunction occurs during the specified period, the product will be repaired or replaced (at our option) without charge. The product will be returned to the customer prepaid.

**Exclusions and Limitations:** The Limited Warranty does not apply to: (a) exterior finish or appearance; (b) certain specific items described in the individual product-line statement(s) below, or in the individual product data sheet or owner's manual; (c) malfunction resulting from use or operation of the product other than as specified in the product data sheet or owner's manual; (d) malfunction resulting from misuse or abuse of the product; or (e) malfunction occurring at any time after repairs have been made to the product by anyone other than Electro-Voice or any of its authorized service representatives. **Obtaining Warranty Service:** To obtain warranty service, a customer must deliver the product, prepaid, to Electro-Voice or any of its authorized service representatives together with proof of purchase of the product in the form of a bill of sale or receipted invoice. A list of authorized service representatives is available from Electro-Voice at 600 Cecil Street, Buchanan, MI 49107 (616/695-6831) and/or Electro-Voice West, at 8234 Doe Avenue, Visalia, CA 93291 (209/651-7777). **Incidental and Consequential Damages Excluded:** Product repair or replacement and re-

turn to the customer are the only remedies provided to the customer. Electro-Voice shall not be liable for any incidental or consequential damages including, without limitation, injury to persons or property or loss of use. Some states do not allow the exclusion or limitation of incidental or consequential damages so the above limitation or exclusion may not apply to you. **Other Rights:** This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

**Electro-Voice N/D, PL, BK, and Professional Microphones** are guaranteed against malfunction from any cause for two (2) years from the date of original purchase. In addition, the Limited Warranty for the acoustic system contained in these microphones shall apply for the life of the product, defined as a period of ten (10) years from the date that the manufacture of the specific microphone has been discontinued. Any and all active electronics incorporated in these microphones are guaranteed against malfunction due to defects in materials or workmanship for a period of three (3) years from the date of original purchase. The Limited Warranty does not extend to cables, cable connectors, or switches. Additional details are included in the Uniform Limited Warranty statement.

Service and repair address for this product: Electro-Voice, Inc., 600 Cecil Street, Buchanan, Michigan 49107.

Specifications subject to change without notice.



**ELECTRO-VOICE** a MARK IV company **600 Cecil Street, Buchanan, Michigan 49107**  
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